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# Little loud-makers

## Ten-inch active speakers in a comparison listening test



»Basic 100«,  
dB Technologies »Opera  
Live 210«, FBT »MAXX-  
2a«, JBL »EON-10 G2«,  
LD Systems LDP-10 2A,  
Mackie SRM-350 and  
RCF ART-310 A

*All candidates in this comparison  
test at a glance*

## PA. ■ ■ ■ TEN-INCH ACTIVE SPEAKERS IN COMPARISON

By Frank Pieper and Martin Kennerknecht

Anyone playing music or DJing on a small scale and seeking to keep their setup simple has no choice but to opt for an active PA. A satellite system with a subwoofer is one option; the classic powered enclosure on a stand is the other. Though 12"/1"-loaded all-round speakers are commonplace, handy 10"/1" combinations are also available on the market. Tools 4 music did some research and invited seven candidates to a comparison test.



The test winner – FBT's »MAXX-2a« took top honors in the »performance« and »value for money« categories

tools 4 music  
**PREIS WERT**  
TESTSIEGER

tools 4 music  
**PERFORMANCE**  
TESTSIEGER

### Street prices

<b>dB Technologies</b>	
»Basic 100«:	222 euros
<b>dB Technologies</b>	
»Opera Live 210«:	299 euros
<b>FBT</b>	»MAXX-2a«: 599 euros
<b>JBL</b>	»EON-10 G2«: 498 euros
<b>LD Systems</b>	
LDP-10 2A:	159 euros
<b>Mackie</b>	SRM-350: 544 euros
<b>RCF</b>	ART-310 A: 549 euros

#### Info:

[www.dbtechnologies.de](http://www.dbtechnologies.de)  
[www.fbt-musixx.de](http://www.fbt-musixx.de)  
[www.audio-pro.de](http://www.audio-pro.de) (JBL)  
[www.adamhall.com](http://www.adamhall.com)  
 (LD-Systems)  
[www.mackie.com](http://www.mackie.com)  
[www.rcf.it](http://www.rcf.it)

Because of their dimensions and convenient handling, 10"/1" active enclosures always merit consideration for playing small venues with little room for the PA or traveling with limited transport capacity. Even when it comes time to play bigger gigs, the small 10" speakers still provide good service as side-fills or floor monitors. Of course, this setup can't match the volume levels of high-end 12"/1" or 15"/2" cabinets, and bass response is a lot learner by design. This is why it is advisable to reinforce only those instruments in which midrange and high frequencies figure prominently, such as vocals, guitars, keyboards, and so forth. Kick drums, electric basses and DJ setups with powerful low end soon drive these small speakers to their limits. These conditions demand a subwoofer to support the 10" active cabinet, and signal separation that redirects low frequencies to the bass bin.

### Plastic vs. wood

Apart from JBL, all manufacturers of participating cabinets use enclosures made entirely of plastic. Just a few years ago this was not the norm. But customers speedily accepted the first of these enclosures and injection molders are much more cost-effective than even extensively automated CNC joineries, particularly for high-volume production. This is why almost all audio manufacturers extended their

offerings in this direction. Recesses, panels, holes, grips, high-frequency horns, feet and so forth can be integrated into the plastic housing's design and made in a single pass when injecting the molding blank. Compared with the classic material wood, the finishing effort for plastic chassis is slight. They require no cutting and little milling and drilling. What's more, manufacturers do not need to buy and mount the aforementioned add-on parts separately. Also, the enclosure's surfaces require no painting or felt covering. And the right specially formulated blend of plastics has proven remarkably resistant to weather influences such as sunlight, rain and humidity.

### The cabinets

Before we get down to essentials - the listening tests - let's briefly review the participants, their common characteristics and special features. All enclosures feature multi-functional housings. This means speaker stand mounts are on board and the slanted housings can serve as floor monitors. For utmost giggering flexibility, every enclosure features integrated bushings that accept wall mounts, rigging frames and lugs. Dedicated power amps drive tweeters and woofers separately. This makes it easy to work electronic magic to improve audio performance using steep slopes, time alignment, EQ equalization and limiters



## FEEDBACK RESISTANCE AND SOUND PRESSURE

The volume at which a microphone begins feeding back on stage hinges on the mic's properties, the speaker and mic setup, and the venue's acoustics, as well as the cabinet's reflectivity and voicing. In back-to-back comparison, we placed each cabinet, one after another, onto the same stand at a fixed position in the room, and pointed it toward a corner of the room to detect differences in feedback sensitivity. A cardioid microphone with a neutral frequency response stood one and a half meters away, pointing to the opposite corner of the room. All enclosures had the same gain level setting as in the preceding listening test, with any EQs adjusted to neutral settings. Then we turned up a precisely scaled preamplifier patched between the enclosure and microphone to the verge of feedback. The higher the gain setting before feedback occurs, the less feedback the enclosure causes. Table 1 shows our readings, which count for 10 percent of the result.

### Maximum sound pressure

Referencing multiple-way active enclosure's SPL to speaker input wattage (dB SPL/W/m) entails elaborate manipulations. This is why we measured SPL with a THD limit of 10 percent at a frequency of 1 kHz (dB SPL/m at 10 percent THD). In other words, we boosted the enclosure's input signal until the THD meter read 10 percent a meter away from the enclosure's front. The SPL reading taken at this point is our measured value. Table 1 also shows these readings, which contribute 20 percent to the result.

Alongside the aforementioned people, we wish to thank Katharina Ruppert, Markus Heel, Hans-Jörg Zeller, Jens Glockzin, Michl Berktold, Erich Hipp and Dr. Wolfgang Klippel for their support. (Tip: You can learn all about speaker distortion at [www.klippel.de](http://www.klippel.de))

for speaker protection. What's more, active setups enable optimum tuning and matching of power amps and speakers' performance.

The Italian manufacturer dB Technologies sent us two models. One was the budget-priced »BASIC 100« (222 euros retail); the other was the mid-priced »Opera Live 210« (299 euros). Both offer the same standard of features, which earned them five points in this category. An XLR input plus parallel 1/4" jack, a thru input, a level control and a mic/line switch for connecting dynamic microphones direct for rudimentary sound reinforcement tasks are all on board. The two speakers' housings are identical, though the »Opera Live 210« features a more powerful amp and a different voicing.

Also from Italy, FBT's »MAXX 2a« (599 euros) offers a three-band voicing section and a ground-lift switch. These appointments earned three extra points in the features category. On the market for more than ten years now and sporting a striking design, JBL's »EON« series is well known. We received the current »EON-10 G2« (498 euros) model. A design unlike the other candidates, the »EON's« front panel is part of the die-cast aluminum chassis inside the



Took second place in both listening tests: Mackie's SRM-350

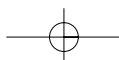
## What the manufacturers think:

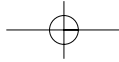
**Arne Deterts from dB Technologies's German distributor sent us the following comment:**

*"Compliments; fabulous test; only tools 4 music does it this well! I found the two in part markedly different ratings for the listening tests especially interesting. It goes to show how subjective the whole thing is. I am delighted the »Live-210« matched far more expensive competitors in the second listening test, to which I attach greater importance because the procedure is better. For us, both brands achieved their objectives. dB Technologies did it with a fabulous price-to-performance ratio and RCF with the most professional audio properties, and almost twice as loud as the rest of the world."*

**Ulrich Mors from the Mackie Support Office Germany on this comparison:**

*"We liked this practically oriented test because it maps out what »ultra transportable« 10" active cabinets are all about. With the SRM-350, Mackie is a front runner in tone and quality. Obviously, we had to compromise between sound and attainable volume in its development. However, the test clearly certified to our development objective - high voice presence at high volume! To achieve this goal, we had to compromise in terms of maximum SPL. This resulted in a compact enclosure that has its strengths in compact sound reinforcement and that our customers like to use as a compact monitor."*





PA. ■ ■ ■ ZEHNZOLL-AKTIVBOXEN IM VERGLEICH

# Auditioning

Two listening tests served to rate the various enclosures as objectively as possible. Interestingly, the two groups' ratings coincided for the place finishers in this comparison. Some differences, however occurred in the positions of enclosures ranked in the middle range.

## Listening test 1

To create as near to identical conditions as possible for every candidate, I arrayed the enclosures side by side, in alphabetical order by manufacturer name. A CD player and a dynamic vocal microphone (Sennheiser e-845) served as signal sources, with both connected to an 8-bus mixing console and routed monaurally to its subgroups. That way I could address each enclosure individually, using the subgroup fader and outputs to blend back and forth between candidates at will. All mixer EQs were off and enclosures' »onboard« tone controls set to neutral positions. I calibrated levels using a noise signal. With all subgroup faders on the console at »0 dB«, I turned up the candidates' »level« knobs individually until the level meter at the auditioning position (at a distance of about four meters) read 85 dB (A). I checked all enclosures for the same volume using a music signal as well as by ear. This ensured all candidates' levels were nearly identical at the same fader position. In listening comparisons like these, human hearing tends to favor louder speakers, crediting them with better quality sound. So, different levels can falsify results.

Eight ears hear more than two, so I invited one guest each to assess the sound on three consecutive evenings: Stefan Schalling plays pop and jazz keyboards as a solo performer and in several combos. My band-mate Gerhard Gerstner, a vocalist and acoustic guitarist, has been musically active since the late '60s. He experienced the full sweep of PA's development, from unwieldy »Voice of the Theater« cabinets to present-

day active PAs. Finally, Jens Pieper plays bass in a rock band. I used Allan Taylor's »Beat Hotel« and Johnny Cash's »Solitary Man« as reference songs. Both are acoustic tracks with distinctive low voices recorded in top-quality audio.

I sent the signal to each enclosure, from first to last and last to first, for about 30 seconds each (at a level of approx. 85 dB (A) at four meters distance). I made a point of blending over to the next speaker only while vocals were audible. My criteria were bass response, midrange punch, resolution and accuracy of detail in the presence and high-frequency range, as well as overall voicing. What's more, all listeners were of course aware that a PA cabinet's musical response is not the only measure of its quality. Assertive speech reinforcement also counts.

After just two songs we made out basic sonic tendencies, so we continued auditioning to pinpoint these more precisely. Turning our attention to the matter of assertive speech reinforcement, we repeated the same procedure with the dynamic vocal microphone. Then I played another rock song with distinct drums and a dominant bass: »The Reason« by »Hoobastank«. All our efforts aimed to answer the question of, »Which cabinet would you buy; which would you not, irrespective of price?« We awarded points for impressions gained with this in mind. Seven candidates took part in the comparison. The best enclosure earned seven points, and the worst just one point. This result accounted for 25 percent of the result.

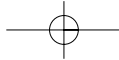
## Listening test 2

To gain further aural impressions, I sent all seven enclosures to our measuring engineer Martin Kennerknecht after we completed the first listening test. He made various measurements and performed a second listening test oriented on the IEC/TR 61305-6:2005 speaker norm. Unlike in the first test, all enclosures were

## TEST BED

Manufacturer	dB Technologies	dB Technologies	FBT
model	»Basic 100«	»Opera Live 210«	»MAXX-2a«
<b>max. SPL @ 1kHz, THD = 10% (dBSPL/m)</b>	112,8 dB	118,1 dB	120,4 dB
<b>points</b>	<b>9</b>	<b>14</b>	<b>16</b>
valuation-basis: 124dB=20 points 104dB= 0 points			
<b>feedback stability, pure comparative value</b>	42,0 dB	40,0 dB	43,5 dB
<b>points</b>	<b>7</b>	<b>5</b>	<b>9</b>
valuation-basis: 45dB=10 points 35dB= 0 points			





placed closely side by side and on top of one another behind a sound-permeable curtain. The advantage was that test listeners could not see the makes under comparison, nor which cabinet was the signal source. This prevented potential personal preferences for or prejudices against the candidates from affecting the evaluation. Another studio monitor served as a reference for assessing sound coloration and occasionally »neutralizing« ears. The enclosures behind the curtain pointed precisely to the auditioning spot some 2.5 m away. They were arrayed at random according to logistical considerations. Using standard program material (band-limited pink noise), levels were adjusted to 75 dBA SPL (also a standard value) to ensure equal conditions. Of course, all controls affecting sound were set to the neutral position. To be safe, a second level check was conducted at 90 dBA. At less than a decibel, deviations were negligible.

A CD player and a switching box stood at the listening spot. This setup enabled each of the seven test subjects to rate each candidate using German schools' grading scale referencing the most diverse musical styles at any desired volume. A questionnaire polled standard audio benchmarks, for example, bass response, high-frequency response, transparency and so forth. Every enclosure received an average grade, which we converted to a point score commensurate with the 25-percent share of this second listening test.

For anyone interested in the details, tables showing the results of both listening tests are posted in the Internet at [www.tools4music.de](http://www.tools4music.de) under the heading of »Mehrwert« (added value).

housing. It is the electronics chassis, a cooling element and the speaker frame for the front-loaded 10" cone. A plastic cover encloses the front panel and the rear of the housing. The enclosure with the smallest dimensions and volume in the test, the »EON-10 G2« features a standard XLR input (mic/line switchable). It can also blend two more unbalanced line signals to a monaural signal and render the composite signal. This means it can cover basic sound reinforcement applications without an outboard mixing console. This earned »EON« two extra feature points.



Rated in the middle-range in listening tests, it scored points for its good features and high SPL.

**What the manufacturers think:**

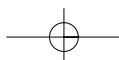
**Markus Jahnel from Adam Hall, LD-Systems' German distributor for, notes:**

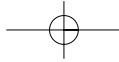
"The LDP-102A shines with an extensive feature set unrivalled in its price range. It delivers high SPL and good speech intelligibility. The deliberate midrange-focused voicing may be worthy of discussion, but the right sound is quickly found with the help of the effective EQ. We're checking the reversed phase. We assume it was a matter of an isolated case. The successful LDP-102A is a solid cabinet with an excellent price-to-performance ratio (about half of the enclosures in this test are almost three times as expensive as the LDP-102A), and this aspect plays a key role in the buying decision. Incidentally, the LDP-102 A earned altogether positive test results in the 1/05 issue of »Soundcheck«, including for its basic voicing."

**Rudolf H. Wagner, Managing Director of MUSIXX GmbH, FBT's distributor in Germany and Austria, on this test:**

"Rarely are comparison tests performed with such meticulousness. All the more satisfying that this result more than confirms FBT's customers in their buying decision. FBT engineers, who brook no compromise when it comes to component and production quality, created a classic with the »MAXX2a« (and the »MAXX« series in general)."

JBL	LD-Systems	Mackie	RCF
»EON-10 G2«	LDP10-2A	SRM-350	ART-310 A
119,7 dB	117,6 dB	109,6 dB	123,7 dB
16	14	6	20
41,0 dB	39,5 dB	38,5 dB	41,5 dB
6	5	4	7





**P.A. ■ ■ ■ TEN-INCH ACTIVE SPEAKERS IN COMPARISON**



*Man, is it loud: The enclosure with the highest SPL in this comparison is the RCF ART-310 A.*

*Failed to convince in the listening test, but scored points for its features and value for the money: LD Systems' LDP-10 2A*

Our lowest-priced candidate, LD-Systems' LDP-10 2A (159 euros) also sports two separately adjustable channels. One is for microphone, the other for line level. Its RCA connectors even accept a stereo signal, although it is processed monaurally. Two-band tone controls and a ground-lift switch round out the feature set. Look for an audio limiter on the LDP-10 2A and you'll search in vain. This is why the enclosure fell just short of earning top marks for its features. Alongside the usual connectors, Mackie's compact SRM-350 (544 euros) offers a special feature. »Contour« is an EQ voicing switch that merited an extra feature point. The control elements of our final candidate, the RCF ART-310 A (549 euros), are limited to bare necessities. An XLR input and output, a level knob and a level selector switch are on board, though unfortunately not an ancillary 7" input.

**Finishing**

All in all, our candidates exhibited good workmanship, whereby the design of JBL's aluminum chassis deserves special mention. However, the »EON's« tweeter suffered a defect on the way to the second listening test. The inside wires to the voice coil broke. The packaging looked intact,

# Benchmarks

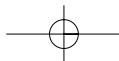
*Each benchmark in the table has a percentage weight that counts towards the result: The two listening tests are worth 25 percent each (25 points each). The categories of features, finishing and feedback resistance count for 10 percent each. The results for maximum SPL factor in 20 percent. Each test candidate can achieve a maximum score of 100 points in the »performance« evaluation. Products with comparatively low prices earn a price bonus (up to 10 points or 10 percent of the total).*

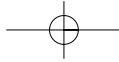
*This comparison test uses the following scale for calculating price points:*

- 150 - 199 euros = 10 points*
- 200 - 249 euros = 9 points*
- 250 - 299 euros = 8 points*
- 300 - 349 euros = 7 points*
- 350 - 399 euros = 6 points*
- 400 - 449 euros = 5 points*
- 450 - 499 euros = 4 points*
- 500 - 549 euros = 3 points*
- 550 - 599 euros = 2 points*
- 600 - 650 euros = 1 point*
- over 650 euros = 0 points*



Manufacturer model	dB Technologies »Basic 100«	dB Technologies »Opera Live 210«
<b>Listening test 1 (max. 25 points)</b>	8	10
<b>Listening test 2 (max. 25 points)</b>	11	15
<b>Total listening tests (max. 50 points)</b>	<b>19</b>	<b>25</b>
<b>Equipment (max. 10 points)</b>	5	5
<b>Workmanship (max. 10 points)</b>	6	6
<b>max. SPL (max. 20 points)</b>	9	14
<b>Feedback stability (max. 10 points)</b>	7	5
<b>Performance (max. 100 points)</b>	<b>46</b>	<b>55</b>
<b>Bonus (max. 10 points)</b>	9	8
<b>Price-value (max. 110 points)</b>	<b>55</b>	<b>63</b>





so we assume vibrations in the truck caused the damage. According to the distributor, this was the first time such a defect occurred. We cannot rule out the possibility that components were overloaded during the test.

We also noticed that the phases of FBT's »MAXX 2a« and LD-Systems' LDP-10 2A are reversed! Unlike the standard pin assignment, pin 3 of the balanced XLR input is wired »hot«. Using these enclosures in combination with cabinets with proper phase assignments – say, as a delay line or side-fill – will cause frequency cancellations and massive signal loss, depending on level and distance. Inserting an adapter into the XLR port to swap pin 2 and pin 3 assignments solves the problem.

### Aural impressions

Add up both listening tests' points and FBT's »MAXX-2a« crosses the finish line first in the »performance and »price« categories. We asked »Which enclosure would you buy on the merits of its audio properties?« Eleven listeners in both tests agreed on the FBT! One exception preferred the Mackie SRM-350. The FBT enclosure delivered the lowest

and most emphatic bass response of all candidates. Performers requiring a loud low end (mobile DJs, especially, come to mind), but do not wish to transport and set up subwoofers every time out, should make a mental note of the »MAXX-2a«. The enclosure's midrange response is rather restrained; at least there are no noticeable frequency peaks. High-frequency response is remarkably clear, with detailed resolution and properly proportioned volume. Anyone requiring more assertive voice reinforcement can easily boost midrange frequencies with the built-in EQ.

Mackie's SRM-350 took second place in the aural evaluation. Compared with the FBT, it sounds utterly different, delivering far more low mids and presence that add punch and assertiveness to the sound. No other cabinet in the test renders speech and vocals as concisely and powerfully as the SRM-350. It is perfect for cutting through the din in locations with high noise levels such as pubs and small festival tents. But the Mackie SRM-350 can also sound »sweet«. Activating the rear »Contour« switch shapes the frequency response curve like a »bathtub,« slightly boosting low and high frequencies to make this cabinet's powerful midrange less dominant.

### What the manufacturers think

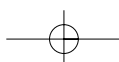
**Carsten Peter, Product Manager at JBL's German distributor Audio Pro, let us know that:**

*»Unfortunately, this test does not meet with our approval, despite the good placing. Too many factors were left to coincidence or not handled professionally. For example, measurements were taken »oriented on the IEC61305-6:2005 method of measurement.« This standard is expressly for »household hi-fi equipment! In the second listening test, speakers were »placed closely side by side and on top of one another behind a sound-permeable curtain, arrayed at random according to logistical considerations!« This means all results are randomly dependent on the room and room modes, and therefore devoid of purpose! Anyone seeking to seriously attempt subjective speaker evaluations should be aware that speakers must be placed at precisely the same position within a room for objective comparison. (See also »AES recommended practice for professional audio - subjective evaluation of loudspeakers« AES-20). This is only possible in a well-equipped measuring lab. So many parameters must be observed, for example (trained) people must hear and rate within fewer than five seconds comparison speakers placed at precisely the same position in a blind test. A conceivable alternative would be listening sessions with revolving speaker positions so every speaker sits once at every position. Other than that, we are of course pleased with the second place (that is, in the »value for money« category; editor's note) that documents the excellent features and finishing of the »EON-10G2«.*

*(Editor's note: We oriented this comparison test on the IEC/TR 61305-6:2005 standard; AES-20 is merely a recommendation. We always find discussions about method stimulating, but we believe there's no doubt about the test results' practical relevance.)*



FBT	JBL	LD-Systems	Mackie	RCF
»MAXX-2a«	»EON-10 G2«	LDP10-2A	SRM-350	ART-310 A
25	12	1	21	14
19	15	10	15	15
<b>44</b>	<b>27</b>	<b>11</b>	<b>36</b>	<b>29</b>
8	8	9	6	4
7	9	4	8	7
16	16	14	6	20
9	6	5	4	7
<b>84</b>	<b>66</b>	<b>43</b>	<b>60</b>	<b>67</b>
2	4	10	3	3
<b>86</b>	<b>70</b>	<b>53</b>	<b>63</b>	<b>70</b>





## PA. ■ ■ ■ TEN-INCH ACTIVE SPEAKERS IN COMPARISON

### Pros & Cons

#### dB Technologies »Basic 100«

- + Lightweight
- + Highly feedback resistant
- + Second-lowest price in the test
- Basic features only
- Not entirely convincing in the listening test

#### dB Technologies »Opera Live 210«

- + Bass response
- + Lightweight
- + Low price
- Basic features only

#### FBT »MAXX-2a«

- + Highest marks in the listening test
- + Richly detailed high-frequency response
- + Three-band EQ
- + Ground-lift switch
- + Good bass response
- + High SPL
- Inverted phase (pin 3 is »hot«)

#### JBL »EON-10 G2«

- + Detailed operating manual
- + Up to three input signals mixable
- + Lightweight
- + Handy
- + High SPL
- High-frequency response is too soft

#### LD Systems LDP-10 2A

- + Lowest price in the test
- + Two-band EQ
- + Two input signals mixable
- + Ground-lift switch
- No limiter
- Did not convince in the listening test
- Inverted phase (pin 3 is »hot«)

#### Mackie SRM-350

- + Detailed operating manual
- + Punch midrange
- + Good rating in the listening test
- + Good speech intelligibility
- Comparatively low SPL

#### RCF ART-310 A

- + Detailed response
- + Good rating in the listening test
- + High SPL
- + Neutral voicing
- No 1/4" input
- High-frequency range a bit too loud

The next candidate was the RCF ART-310 A. Though this enclosure's fine resolution and detail tend toward the FBT »MAXX-2a«, it sounds more neutral. This means that low and midrange frequencies are equally loud, but neither dominates. For our taste, the RCF's horn is a bit overbearing in relation to the 10" speaker. This makes the cabinet sound somewhat strident, especially with sibilants.

Listeners' opinions were most divided on JBL's »EON-10 G2«. Ultra low frequencies are all but inaudible because of the housing's small size. This cabinet has its strengths in the middle range. Performance tapers off towards the higher frequency range. For my taste, the tweeter could be louder and add more »gloss« to the sound. The »EON-10 G2« sounds too flat for me. Other listeners felt its sound to be »unobtrusive« and rated the enclosure higher so it took a good position in the middle of the field.

Up next were the two enclosures from dB Technologies. The »Opera Live 210« scored higher than the »BASIC 100« on the strength of its stronger bass response. Their sound is heavy on the mids, which may not be everyone's cup of tea. We asked »Which enclosure would you not under any circumstances buy due to its audio properties?« Three of our test listeners cited the »BASIC«. Neither of the two can match the top-ranked cabinets' high-frequency response and resolution.

The LDP-10 2A from LD-Systems brought up the rear, as the other test subjects agreed. The midrange figures prominently in its sound, and it lacks real low and high frequencies. In this form, the cabinet fails to satisfy more discerning demands. In its defense, we have to say the internal voicing section improves the sound markedly with the bass and treble well up. However, our aural comparison is all about the fundamental voicing. Right now the LDP-10 2A could do with much improvement.

### Conclusion

Seven active enclosures lined up for comparison and the clear winner was FBT's »MAXX-2a« in both the performance and price categories. It earned so many points in the listening tests that even the low price

bonus didn't jeopardize its lead. The »MAXX-2a« from FBT is a good choice for anyone who plays sedate jazz and dance music or roams the countryside as a mobile DJ. Its richly detailed sound with a full, round low end doesn't need subwoofer support as long as the volume remains at reasonable levels. In third place after the A/B auditioning tests, RCF's ART-310 A moved up to take second place in both categories owing to an excellent result in the SPL measurement. The story is much the same for JBL's »EON10 G2«. Ranked in the middle of the field for its sound, high marks for finishing and SPL earned it a good placement in the bang-for-buck stakes. Mackie's SRM-350 lost a few feathers. Although its dominance in speech reinforcement helped the enclosure fare well in listening tests, its relatively poor SPL/THD value relegated it to fourth place. Next came the »Opera Live 210« from dB Technologies. It got the job done with its external EQ tweaked. Though dB Technologies' »BASIC 100« and the LDP 10-2A from LD-Systems brought up the year, let's not lose sight of their lower prices. It deserves mention that all the active enclosures ranked tops in this test also sell at upscale prices. Quality has its price? Yes, in this test that old adage once again proved true!



*An affordable enclosure with good results in the feedback test: dB Technologies' »Basic 100«*

*dB Technologies' »Opuses Live 210« is also affordably priced - it achieved a good midclass rating*

